

RECEIVED

Leslie
7103

JAN 15 2016

DIV. OF OIL, GAS & MINING

**Form MR-REV-att (DOGM – Revise/Amend Change Form)
(Revised September 14, 2005)**

Application for Mineral Mine Plan Revision or Amendment

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments and obligations, herein.

Joseph M. Giraud, P.E.
Print Name

Print Name

John Mine Manager Closure Properties
Sign Name Position

Dec 16, 2015
Date

Return to:

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801
Phone: (801) 538-5291 Fax: (801) 359-3940

O:\FORMS\MR-REV-att.doc

FOR DOGM USE ONLY:
File #: M/ /

RECEIVED

JAN 15 2016

**NOTICE OF INTENTION TO AMEND MINING & RECLAMATION PLAN
BARRICK RESOURCES (USA), INC. - MERCUR MINE**

DIV. OF OIL, GAS & MINING

TABLE OF CONTENTS

Form MR-REV

Executive Summary

Chapter I INTRODUCTION	1
1.0 General.....	I
1.1 Location and Access	I
1.2 Surface and Mineral Ownership	1
1.3 Areas of Disturbance	2
Chapter 2 SITE DESCRIPTION	4
2.1 Current Operation.....	4
2.2 Land Use	4
2.3 Geology	7
2.4 Climate	7
2.5 Surface Water Hydrology	8
2.6 Ground Water Hydrology.....	13
2.7 Soils	14
2.8 Vegetation.....	16
2.9 Wildlife.....	22
Chapter 3 EXISTING OPERATION.....	27
3.1 Ancillary Facilities.....	27
3.2 Materials and Waste Disposal	30
3.3 Topsoil Management Plan.....	31
3.4 Acid Drainage Potential.....	31
3.5 Hole Plugging	33
Chapter 4 IMPACT ASSESSMENT	34
4.1 Topography	34
4.2 Surface Water	34
4.3 Ground Water.....	35
4.4 Vegetation	35
4.5 Wildlife Habitats	36
4.6 Soil Resources	36
4.7 Air Quality	37
4.8 Public Health and Safety.....	37
Chapter 5 PLANNED RECLAMATION.....	38
5.1 General Overview.....	38
5.2 Final Reclamation Techniques.....	38
5.3 Heap Leach Areas, Impoundments, and Facilities Decommissioning	39

5.3.1	Heap Leach Areas.....	39
5.3.2	Tailing Impoundment.	41
5.3.3	Mill and Ancillary Facilities.....	44
5.4	Regrading	48
5.5	Drainage and Sediment Control.....	49
5.8	Monitoring Plan	54
Chapter 6	REQUEST FOR VARIANCES.....	55
6.1	Variance Request from Rule R647-4-111-6, Slopes	55
6.2	Variance Request from Rule R647-4-111-9, Dams and Impoundments.....	55
6.3	Variance Request from Rule R647-4-111-12, Topsoil	56
6.4	Variance Request from Rule R647-4-111-13, Revegetation	56
Chapter 7	RECLAMATION BOND.....	58
Chapter 8	REFERENCES.....	59

List of Tables

1.3-1	Land Requirements for Ultimate Disturbance.....	2
2.3-1	Historic and Operational Phase Precipitation Data	9
2.3-2	Historic and Operational Phase Temperature Data	10
2.4-2	Estimated Baseline Sediment Yield from Ephemeral Drainage Basins within Mercur Canyon	13
2.6-1	Soil Series Summary	15
2.7-1	Pinion-juniper Woodland Community Species.....	17
2.7-2	Mixed Brush Community Species	18
2.7-3	Bottomland-Disturbed Community Species.....	19
2.8-1	Summary of Avifauna Data from Three Habitats on the Mercur Study Area.....	22
3.8-1	Data on the Sulfur Content of Rocks in the Mercur District	37
5.83-1	Final Reclamation Components.....	52
5.46-1	Existing Topsoil Inventory and Reclamation Requirements	56
5.67-1	Seed Mixture for All Areas.....	59

List of Figures

1.0-1	General Location - Mercur Mine	3
2.0-1	Property Layout	5
2.4-1	Ephemeral Drainage Basins North of Permit Boundary.....	11
3.4-1	Reservation Canyon Tailing Impoundment.....	32
5.3-1	Reclamation Activity Schedule	51

Appendices

Appendix A - Surface and Mineral Owners in the Mercur District

Appendix B - Stormwater Management Methodology and Design

List of Maps

- 1.1-1 Permit Area and Surface Facilities
- 1.2-1 Mercur Mine Permit Area Land Ownership
- 1.2-2 Mercur Mine Leases and Unpatent Claims
- 2.1-1 Land Use Map
- 2.2-1 Geologic Map and Cross Section
- 2.6-1 Soils Map
- 2.7-1 Vegetation Map
- 2.8-1 Wildlife Habitats
- 5.1-2 Reclamation Configuration and Surety Bond Reference

Drawing Set:

Mercur Mine, Mine Site Reclamation:

TS-1	List of Drawings - Location Map	Revision 0
GS-1	General Site Plan.....	Revision 0
GS-2	Geologic Map and Cross Section	Revision 0
GS-3	Best Management Practices Typical Details	Revision 0
MR-1	General Site Regrading Plan	Revision 1
MR-2	Mercur Hill Basin and Governor's Pad Regrading Plan and Cross Sections.	Revision 0
MR-3	Mercur Hill Basin and Governor's Pad Regrading Isopach	Revision 0
MR-4	Lower 7300 Dump Regrading Plan and Cross Sections	Revision 0
MR-5	Lower 7300 Dump Regrading Isopach	Revision 0
VF3-1	Valley Fill Leach #3 Regrading Plan	Revision 1
VF3-2	Valley Fill Leach #3 Regrading Cross Sections and Details	Revision 1
VF3-3	Meadow Canyon Subsoil Stockpile Reclaimed Plan and Isopach Map	Revision 0
VF3-4	Meadow Canyon Subsoil Stockpile Cross Sections and Details	Revision
Drawing 1	Mercur General Site Plan Revised 2004 Proposed Surety Release Areas (Contours).....	Revision C
Drawing 2	Mercur General Site Plan Revised 2004 Proposed Surety Release Areas Roads and Powerlines.....	Revision C

Drawing Sets (continued)

Storm Water Diversion Channel:

TS-I	List of Drawings - Location Map	Revision 0
GS-3	Best Management Practices - Typical Details.....	Revision 1
DC-1	Site Drainage Plan	Revision 0
DC-2	Northern Channel Plan and Profile / STA. 0+00 to 18+00	Revision 0
DC-3	Northern Channel Plan and Profile / STA. 18+00 to 36+00	Revision 0
DC-4	Northern Channel Plan and Profile / STA. 36+00 to 54+00	Revision 0
DC-5	Northern Channel Plan and Profile / STA. 54+00 to 72+00	Revision 0
DC-6	Northern Channel Plan and Profile / STA. 72+00 to 90+00	Revision 0
DC-7	Northern Channel Plan and Profile / STA. 90+00 to 108+92	Revision 0
DC-8	North West Channel Plan and Profile / STA. 0+00 to 2+71	Revision 0
DC-9	Southern Channel Plan and Profile / STA. 0+00 to 20+00	Revision 0
DC-10	Southern Channel Plan and Profile / STA. 20+00 to 40+00	Revision 0
DC-11	Southern Channel Plan and Profile / STA. 40+00 to 60+00	Revision 0
DC-12	Southern Channel Plan and Profile / STA. 60+00 to 82+03	Revision 0
DC-13	Northern Channel Typical Cross Sections	Revision 0
DC-14	Southern Channel Typical Cross Sections	Revision 0
DC-15	Channel Details 1 of 3	Revision 0
DC-16	Channel Details 2 of 3	Revision 0
DC-17	Channel Details 3 of 3	Revision 0

VFL#1 and Facilities Regrading and Site Drainage Plan

F-1	VFL#1 and Facilities Regrading and Site Drainage Plan	Revision 0
F-2	VFL #1 and Facilities Isopach Map	Revision 0

North Mercur Regrading Plan and Lower Access Road Design:

TS-I	Title Sheet	Revision 0
NM-I	North Mercur Regrading Plan - West Side	Revision 1
NM-2	North Mercur Regrading Cross Section - West Side	Revision I
NM-3	North Mercur Regrading Plan - East Side	Revision I
NM-4	North Mercur Regrading Cross Section - East Side 1 of 2	Revision I
NM-5	North Mercur Regrading Cross Section - East Side 2 of 2	Revision 1
NM-6	Access Road Plan and Profile	Revision I
NM-7	North Mercur Re-grade Details	Revision 0
NM-8	North Mercur Regrading Plan West Side - Isopach Map	Revision 1

Drawing Sets (continued)

Reclamation of Reservation Canyon Tailings Impoundment:

TS-I	Title Sheet	Revision A
GS-I	General Site Plan	Revision I
GS-2	Geologic Map and Cross Section	Revision 1
RC-1	Reservation Canyon Tailing Impoundment Buttress and Levee Reel. Plan .	Revision 0
RC-2	Reservation Canyon Impoundment Cross-Section and Details	Revision 0

RECEIVED

JAN 15 2016

Barrick Resources (USA) Inc.
Mercur Mine M/045/017-88
Escalated Reclamation Cost Estimate Summary Sheet

DIV. OF OIL, GAS & MINING

The following costs are calculated in the Nevada Standardized Reclamation Cost Estimator (SRCE) model which is attached on a CD with this submission. A description of the differing land status and associated acreage can be viewed on User Tab 2 and is summarized in the following table.

<u>Land Status</u>	<u>Acreage</u>
Future Bond Release	165.24
Exempt Land	186.72
Subsidence	15.52
Unreclaimed	36.30
Total	403.78

The direct and indirect costs can be viewed on the "Summary" tab while the escalation and comparison are shown in User Tab 4.

<u>Direct Costs</u>	<u>Amount (USD)</u>	<u>Percent of total Direct Costs</u>
Demolition and Removal	-	
Backfilling and Grading	-	
Revegetation		
Direct Costs (Cost Summary Tab line 114)	\$2,385,394	
<u>Indirect Costs</u>		
Engineering, Design and Construction	143,124	6%
Contingency	190,832	8%
Insurance	14,334	2% of direct labor
Performance Bond	-	0%
Contractor Profit	238,539	10%
Contract Administration	190,832	8%
Government Indirect Costs	-	0%
Indirect Cost Subtotal	777,661	33%
Total Cost Estimate	\$3,163,055	
Estimate period	5 years	
Escalation factor	1.2% / year	
Escalation	194,393	
	\$3,357,447	
Estimated Bond Amount Required (rounded to nearest 1,000)	\$3,164,000	
Posted Surety	4,766,352	
Difference between estimate and posted surety	\$1,602,352	
Percentage of Surety committed	70%	

User Tab 1 in the SRCE model is a Table of Contents for all non-standard calculations which were fed into the “Other User” tab. Modifications to the previous cost estimate include the addition of pumping and active evaporation costs for contact water for a period of 15 years and the Utah escalation factor as discussed with DOGM Staff. Detailed analysis of roadway, yard and other reclamation work that is outstanding is also itemized in the model.

Barrick is not requesting any bond release at this time.